



- 3 to 5V or 9 to 26V Input
- Outputs 1V to 12V
- Surface Mount
- Low 4.2mm to 5.5mm Profile
- Non Isolated Output

## CE Series

1.2 - 2.5A Point of Load Converters

### Key Market Segments & Applications

- Telecommunications
- Datacom
- Instrumentation

### CE Series Features and Benefits

#### Features

- Wide range output
- Constant switching frequency
- Five sided shielding

#### Benefits

- Reduces need for custom models
- Easier system filtering
- Reduced EMI

### Specifications

MODELS		CE-1003	CE-1004	CE-1005	CE-1050
ITEMS					
Nominal Output Voltage VDC		1.5 to 3.3	3.3 to 5.0	1 to 3.3	(2) 3.3 tp 12.6
Input Voltage Range VDC		6 - 16		3 - 5.25	9 - 26.4
Input Current (max)	A	2.4			1.8
Ripple & Noise (typ) (pk - pk)	mV	100		50	
Total Regulation (max)	mV	±5%		±4%	±5%
Overload Protection (typ)	A	2		3	3.5
Remote On / Off (1)	-	ON = 2 - 6V; OFF= 0-0.6V		ON = <0.5V; OFF= >2V	ON = 3 -6V; OFF= 0-0.3V
Temperature (operating)	°C	-40°C to +85°C (CE1003, 80% load above 70°C)			-20°C to +85°C
Temperature (storage)	°C	-40°C to +85°C			-20°C to +85°C
Humidity (operating)	-	10 - 90% RH Non condensing @ max temp +38°C			
Humidity (storage)	-	Sealed packaging, see Technical Download			
Cooling	-	Convection or forced air			
Vibration (non operating)	-	Frequency: 10-2000Hz, Sweep time: 4 minutes per cycle Amplitude: 10G, 30 minutes each x, y, and z direction			
Shock	-	Peak Acceleration: 100G, Duration: 6msec; three times each axis			
Weight (max)	g	1.8		1.7	3.7
Size	mm	18.3 x 12.3 x 4.2			21.3 x 16.4 x 5.5
Warranty	yrs	1			

- Notes:** (1) Pin 5  
(2) Input / output voltage differential must be at least 4V.

Model Selector			
Model	Output Voltage (V)	Output Current (A)	Efficiency (typ)
CE-1003	1.5 - 3.3 <sup>(2)</sup>	1.5	86.5%
CE-1004	3.3 - 5 <sup>(2)</sup>	1.5	86.5%
CE-1005	1.0 - 3.3	2.5 <sup>(3)</sup>	91.5%
CE-1050	3.3 - 12.6	2.5 <sup>(4)</sup>	90.0%

**Notes:**  
 (2) See Programming Table  
 (3) See CE-1005 Derating Table  
 (4) See CE-1050 Derating Curves

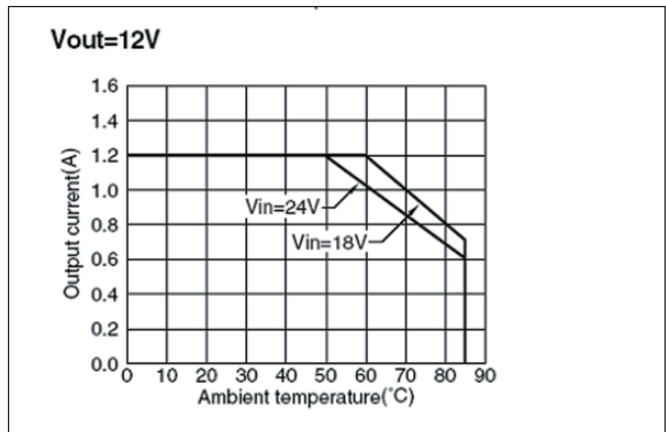
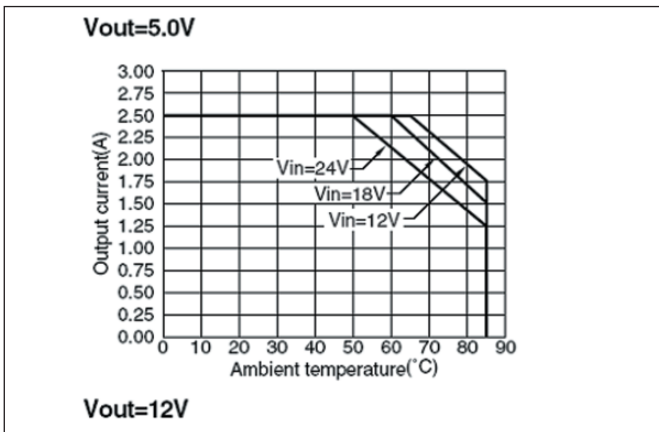
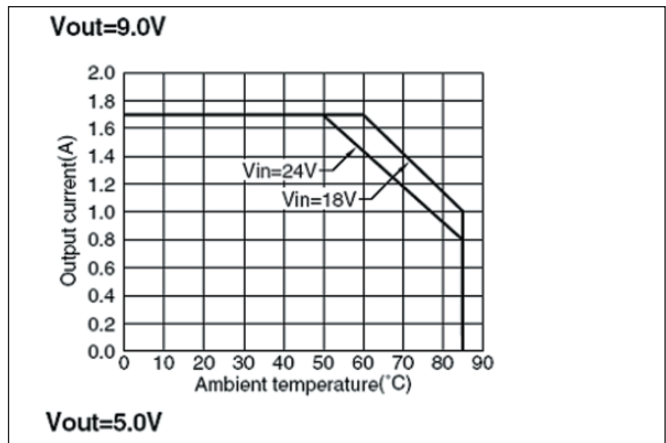
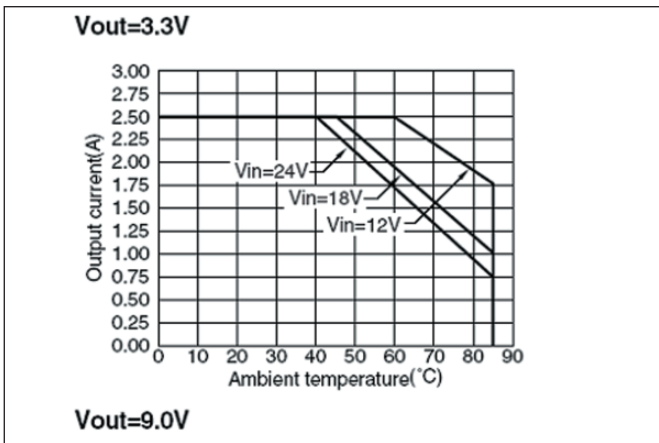
CE-1005 Derating Table		
Vout	3.3 Vin	5.0 Vin
1.0	1.75A	1.5A
1.2	1.85A	1.65A
1.5	2.00A	1.85A
1.8	2.15A	2.0A
2.0	2.25A	2.2A
2.5	2.50A	2.5A
3.3	-	2.5A

CE-1003, 1004 Programming Table				
Pin 7	Pin 8	Pin 9	Output Voltage CE-1003	(Vout) CE-1004
0	0	0	3.3	5.0
0	0	1	3.0	4.8
0	1	0	2.8	4.5
0	1	1	2.5	4.3
1	0	0	2.3	4.0
1	0	1	2.0	3.8
1	1	0	1.8	3.5
1	1	1	1.5	3.3

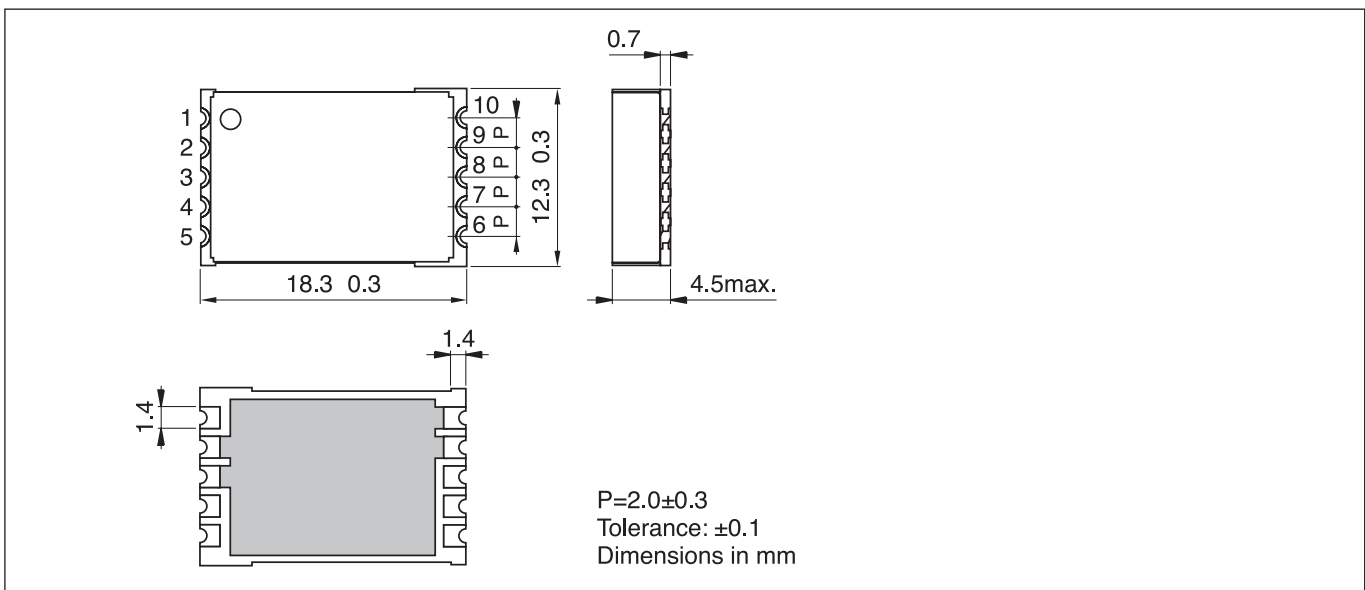
0 = Short to GND 1 = Open  
 See web site for detailed specifications

CC-1005 can be trimmed with external resistor

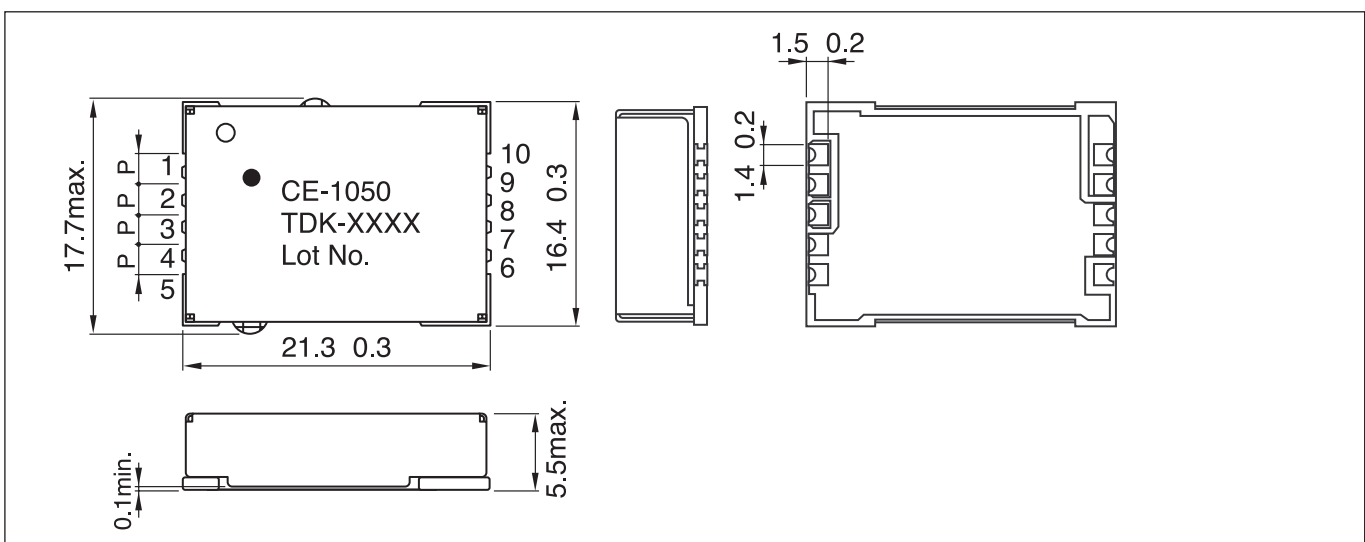
Derating Curve CE-1050 Series



## Outline Drawing CE-1000 Series



## Outline Drawing CE-1050 Series



Pinout				
Pin	CE-1003	CE-1004	CE-1005	CE-1050
1	Vin	Vin	Vin	Vin
2	Vin	Vin	Vin	Vin
3	GND	GND	GND	GND
4	GND	GND	GND	GND
5	On / Off	On / Off	On/Off	On/Off
6	GND	GND	GND	GND
7	Vs-0	Vs-0	GND	GND
8	Vs-1	Vs-1	Vset	Vset
9	Vs-2	Vs-2	Vout	Vout
10	Vout	Vout	Vout	Vout